

We claim:

1. A transdermal drug delivery composition comprising:

(a) a pressure sensitive adhesive comprising a copolymer comprising copolymerized monomers, wherein said monomers comprise a first monomer selected from isooctyl acrylate, ethyl hexyl acrylate, n-butyl acrylate and combinations thereof, and a second monomer selected from acrylamide, vinyl acetate, hydroxy ethyl acrylate, acrylic acid, and combinations thereof;

(b) at least one excipient selected from amine oxides, unsaturated fatty acids, isopropyl myristate, lauroglycol, α -terpineol, polyethylene glycol, sorbitan esters, lactic acid, dimethylsulfoxide, and combinations thereof; and

(c) olanzapine or a pharmaceutically acceptable salt thereof.

2. The transdermal drug delivery composition according to claim 1, wherein the composition is substantially free of undissolved olanzapine.

3. The transdermal drug delivery composition according to claim 1, wherein the second monomer is vinyl acetate.

4. The transdermal drug delivery composition according to claim 1, wherein the olanzapine comprises the free base form.

5. The transdermal drug delivery composition according to claim 1, wherein the excipient is a skin permeation enhancer.

6. The transdermal drug delivery composition according to claim 5, wherein the permeation enhancer is selected from amine oxides, unsaturated fatty acids, α -terpineol, polyethylene glycol, sorbitan esters, and combinations thereof.

7. The transdermal drug delivery composition according to claim 5, wherein the permeation enhancer is an amine oxide or an unsaturated fatty acid.

8. The transdermal drug delivery composition according to claim 7, wherein the amine oxide is lauramine oxide.

5 9. The transdermal drug delivery composition according to claim 5, wherein the permeation enhancer is an unsaturated fatty acid.

10 10. The transdermal drug delivery composition according to claim 5, wherein the unsaturated fatty acid is oleic acid.

10 11. The transdermal drug delivery composition according to claim 1, wherein the excipient is a solubilizer for olanzapine.

15 12. The transdermal drug delivery composition according to claim 11, wherein the solubilizer is lactic acid.

 13. The transdermal drug delivery composition according to claim 11, wherein the solubilizer is dimethylsulfoxide.

20 14. A device for the transdermal delivery of olanzapine comprising a backing and a composition according to claim 1, said composition being adhered to one surface of the backing.

25 15. A transdermal drug delivery composition comprising olanzapine or a pharmaceutically acceptable salt thereof, and a permeation enhancer selected from the group consisting of lauramine oxide, oleic acid, and combinations thereof.

30 16. The transdermal drug delivery composition according to claim 15, further comprising a pressure sensitive adhesive.

17. A method of treatment of schizophrenia or bipolar mania comprising:

(a) providing a transdermal drug delivery composition according to claim 1;

and

5 (b) applying the composition to an external part of the human body for a period of time sufficient to achieve a desired therapeutic result.

18. The method of claim 17, wherein the period of time is between about 1 day and about 7 days.

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19. A method of treatment of schizophrenia or bipolar mania comprising:

(a) providing a transdermal drug delivery composition according to claim

16; and

15 (b) applying the composition to an external part of the human body for a period of time sufficient to achieve a desired therapeutic result.

20. The method of claim 19, wherein the period of time is between about 1 day and about 7 days.

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